

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

TRANSLATION
PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

SE-F064-PCT0

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2005/015725

International filing date (day/month/year)

30.08.2005

Priority date (day/month/year)

01.09.2004

International Patent Classification (IPC) or both national classification and IPC

Applicant

SEIKO EPSON CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Date of completion of this opinion	Authorized officer
Facsimile No.		Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/015725

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:



the international application in the language in which it was filed



the translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rule 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material



a sequence listing



table(s) related to the sequence listing

b. format of material



on paper



in electronic form

c. time of filing/furnishing



contained in the international application as filed



filed together with the international application in electronic form



furnished subsequently to this Authority for the purposes of search

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/015725

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	<u>1-13</u>	YES
	Claims	_____	NO
Inventive step (IS)	Claims	_____	YES
	Claims	<u>1-13</u>	NO
Industrial applicability (IA)	Claims	<u>1-13</u>	YES
	Claims	_____	NO
2. Citations and explanations:			
<p>Document 1: JP, 2004-170955, A (Canon Inc.), 17 June, 2004 (17.06.04)</p> <p>Document 2: JP, 2001-183878, A (Canon Inc.), 6 July, 2001 (06.07.01)</p> <p>Document 3: JP, 62-59978, A (Canon Inc.), 16 March, 1987 (16.03.87)</p> <p>Document 4: JP, 2003-330235, A (Seiko Epson Corp.), 19 November, 2003 (19.11.03)</p> <p>Document 5: JP, 10-186770, A (Canon Inc.), 14 July, 1998 (14.07.98)</p> <p>Document 6: JP, 2002-236405, A (Seiko Epson Corp.), 23 August, 2002 (23.08.02)</p>			
<p>For the subject matters of claims 1-4, 10, 11 and 13, document 1 describes a control means that executes adjustment operations to adjust charge conditions and development conditions based on the cumulative quantity of operation of a latent-image carrier as the timing information, and document 2 describes a control means that executes adjustment operations to adjust charge conditions based on changes in the charge characteristic of a latent-image carrier, then to create patch images, and then to adjust development conditions based on the detected toner concentration. A person skilled in the art could have easily created a control means that executes adjustment operations to adjust charge conditions based on the timing information described in document 1, then to produce patch images, and then to adjust development conditions based on the detected toner concentration.</p> <p>Adjusting a charge means to abut a latent-image carrier, and a charge bias, is described in document 1.</p>			
<p>For claims 5 and 8, document 3 mentions that charge currents are adjusted based on information concerning the life of a charge means. A person skilled in the art could have easily used information concerning the life of a charge means as the timing information as in document 1.</p>			
<p>For claims 6, 7, 9 and 12, document 4 mentions that adjustment operations are executed based on information different from that concerning the charge characteristic of a latent-image carrier, and so a person skilled in the art could have easily created a control means to execute adjustment operations based on a plurality of timing information pieces. In addition, as described in documents 5 and 6, executing a plurality of adjustment operations by preparing simplified adjustments was well known.</p>			

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TRANSLATION

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(PCT Rule 43bis.1)

To:		Date of mailing (day/month/year)
Applicant's or agent's file reference SE-F064-PCT0		FOR FURTHER ACTION See paragraph 2 below
International application No. PCT/JP2005/015725	International filing date (day/month/year) 30.08.2005	Priority date (day/month/year) 01.09.2004
International Patent Classification (IPC) or both national classification and IPC		
Applicant SEIKO EPSON CORPORATION		

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Name and mailing address of the ISA/JP	Date of completion of this opinion	Authorized officer
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INTERNATIONAL SEARCHING AUTHORITY

International application No.

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Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:
 - ☒ the international application in the language in which it was filed
 - ☐ the translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rule 12.3(a) and 23.1(b)).
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 - a. type of material
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ on paper
 - ☐ in electronic form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed
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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2005/015725

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-13	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-13	NO
Industrial applicability (IA)	Claims	1-13	YES
	Claims		NO

2. Citations and explanations:

Document 1: JP, 2004-170955, A (Canon Inc.), 17 June, 2004 (17.06.04)
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